

**I Claim:**

1. A gasket device for use on a brake drum or wheel hub, said gasket device comprising an annular, flat gasket seal made of thin, flat, flexible, polyethylene material and having a circular outer periphery with a first diameter corresponding substantially to the diameter of an annular attachment surface of said brake drum or hub on which said gasket device is to be used, said gasket seal also having a circular central opening with a second diameter corresponding substantially to the diameter of a central cylindrical extension adjacent said brake drum or hub and a plurality of small openings for snugly accommodating wheel studs on said brake drum or hub, each of which can pass through a respective one of said small openings during use of said gasket device,

wherein said gasket device is adapted for mounting in a sealing manner between said brake drum or hub and a central mounting portion of a vehicle wheel and is capable of conforming to an adjacent back surface of said central mounting portion of the wheel when said gasket device is used.

2. A gasket device according to claim 1 wherein said gasket seal has a substantially uniform thickness which is less than 0.1 inch.

3. A gasket device according to claim 1 wherein there are five or fewer of said small openings distributed evenly and circumferentially around said gasket seal.

4. A gasket device according to claim 3 wherein said small openings have a uniform diameter which does not exceed about 5/8<sup>th</sup> inch.

5. A gasket device according to claim 3 wherein said first diameter of the gasket seal is less than 8 inches and said polyethylene material has a medium density.

6. A vehicle wheel and hub combination comprising:  
a vehicle wheel including an annular rim and an annular connecting section extending radially inwardly from said rim and rigidly connected thereto,

said connecting section having a plurality of stud-receiving holes therein spaced inwardly from said rim and spaced evenly and circumferentially about said wheel;

a wheel hub assembly including a rotatable radially extending, annular attachment surface, wheel studs extending from said attachment surface in an axial direction relative to a central axis about which said wheel is adapted to rotate, and a circular central cylindrical extension projecting axially outwardly from the center of said attachment surface, said cylindrical extension having an outer circumference spaced radially inwardly from said wheel studs;

an annular, flat, flexible gasket seal made of flat polyethylene material having a substantially circular outer periphery with a diameter corresponding substantially to the diameter of said attachment surface and also a substantially circular central opening with a diameter corresponding closely to the diameter of said central cylindrical extension, said gasket seal being formed with a plurality of small openings snugly and respectively accommodating said wheel studs each of which passes through a respective one of said small openings and a respective one of said stud-receiving holes;

and wheel nuts detachably connecting said vehicle wheel to said wheel hub assembly by means of said wheel studs with said gasket seal tightly clamped between said connecting section and said attachment surface,

wherein said gasket seal has a shape that conforms to an adjacent contact surface of said connecting section of the wheel.

7. A combination according to claim 6 wherein said wheel hub assembly includes a wheel hub and a disk brake having a calliper with a brake pad and a brake disk carried by wheel hub and spaced axially inboard from said connecting section of the wheel.

8. A combination according to claim 6 wherein said wheel hub assembly includes a drum brake having a rotatable brake drum on which said attachment surface is provided.

9. A combination according to claim 6 wherein said gasket seal has a substantially uniform thickness which is about 0.05 inch.

10. A combination according to claim 6 wherein said small openings have a uniform diameter which does not exceed  $5/8^{\text{th}}$  inch and the diameter of the outer periphery of said gasket seal and of the annular attachment surface is less than 8 inches.

11. A combination according to claim 8 including a second annular, flexible gasket seal mounted in said wheel hub assembly against an inner side of said brake drum and spaced axially inwardly from said connecting section of the wheel, said second gasket seal having a substantially circular outer periphery, a substantially circular central opening with a diameter corresponding closely to said diameter of said central cylindrical extension, and a plurality of small openings snugly and respectively accommodating said wheel studs which pass therethrough.

12. A combination according to claim 11 wherein said second gasket seal is made of thin, flat polyethylene material.

13. A combination according to claim 12 wherein said second gasket seal is made of higher density polyethylene than the first mentioned gasket seal and has a thickness less than 0.1 inch.

14. A gasket device for mounting a brake drum in a brake and wheel assembly for a vehicle, said gasket device comprising an annular, flat gasket seal made of thin, flexible polyethylene material and having a circular outer periphery with a first diameter corresponding substantially to an outer diameter of a drum mounting hub flange of said brake and wheel assembly on which said gasket device is to be used, said gasket seal also having a circular central opening with a second diameter substantially less than said first diameter and a plurality of small openings for snugly accommodating wheel studs of said brake and wheel assembly each of which can pass through a respective one of said small openings during use of said gasket device,

wherein said gasket device is adapted for mounting between said hub flange of said brake and wheel assembly and an inner surface of said brake drum that extends radially relative to a central axis of rotation of the brake drum when

said gasket device is used.

15. A gasket device according to claim 14 wherein said gasket seal has a substantially uniform thickness which is less than 0.1 inch and is able to conform to said inner surface of said brake drum when said gasket device is used.

16. A gasket device according to claim 15 wherein said small openings have a uniform diameter which does not exceed  $5/8^{\text{th}}$  inch.

17. A gasket device according to claim 15 wherein said polyethylene material has a sufficiently high density that it can absorb heat from said brake drum during use of said brake and wheel assembly without being significantly damaged.

18. A vehicle wheel and drum brake combination comprising:  
 a vehicle wheel including an annular rim and an annular connecting section extending radially inwardly from said rim and rigidly connected thereto, said connecting section having a plurality of stud-receiving holes therein spaced inwardly from said rim and spaced evenly and circumferentially about said wheel;  
 a drum brake and hub assembly including a hollow brake drum member, a brake shoe mechanism located in said brake drum member, a rotatable drum mounting hub flange, and a plurality of wheel studs rigidly secured to said hub flange and extending in an axial direction relative to a central axis about which said hub flange and brake drum member are adapted to rotate;  
 a flat gasket seal made of flexible plastics material and having a substantially circular outer periphery with an outer diameter which does not exceed an outer diameter of said hub flange and a plurality of small openings for snugly accommodating said wheel studs, each of which passes through a respective one of said small openings and a respective one of said stud-receiving holes; and  
 wheel nuts detachably connecting said brake drum member and said vehicle wheel to said hub flange with said gasket seal tightly clamped between said hub flange and an inner surface of said brake drum.

19. A vehicle wheel and drum brake combination according to claim 18 wherein said gasket seal is made of flexible polyethylene of sufficiently high density that it can absorb heat from said brake drum during use of said combination without being significantly damaged.
20. A vehicle wheel and drum brake combination according to claim 19 wherein said gasket seal has a substantially uniform thickness which is less than 0.1 inch and conforms to said inner surface of said brake drum.
21. A vehicle wheel and drum brake combination according to claim 20 wherein said gasket seal has a thickness which is about 0.05 inch.
22. A vehicle wheel and drum brake combination according to claim 19 including a second annular, flexible gasket seal clamped between said brake drum member and said connecting section of said vehicle wheel, said second gasket seal having a substantially circular outer circumference with a diameter corresponding substantially to an annular outer attachment surface of said brake drum and a plurality of small holes for accommodating said wheel studs which project outwardly from said outer attachment surface of said brake drum and through said small holes.
23. A vehicle wheel and drum brake combination according to claim 22 wherein said second gasket seal is made of a polyethylene material which is less dense than the polyethylene used for the first mentioned gasket seal.
24. A vehicle wheel and drum brake combination according to claim 23 wherein both gasket seals have an outer diameter which is less than 8 inches and said small openings and small holes both have uniform diameters which do not exceed  $5/8^{\text{th}}$  inch.